Abstract

An annealing apparatus for annealing metallic billets, particularly for use in annealing aluminum-containing billets, comprising at least two contact elements or contact discs made of electrically conducting material, the contact elements being connected to a voltage source so as to provide electric current flow through the billet as it passes between the two contact elements. The material of the contact elements is a light metal, normally aluminum or an aluminum-containing alloy, such that the contact element material is matched to the material of the billet and diffusion of the billet material into the contact element is substantially avoided.